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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,180	12/21/2001	Christian Meier	194070US0PCT	8287
22850	7590	10/02/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NAFF, DAVID M	
			ART UNIT	PAPER NUMBER
			1651	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,180

Applicant(s)

MEIER ET AL.

Examiner

David M. Naff

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: Related applications considered.

Art Unit: 1651

Claims examined on the merits are 1-10, which are all claims in the application.

The preliminary amendment of 8/4/2000 amended the specification and claims 2 and 4.

5 Copending applications 09/764,993 and 09/926,484 have been considered.

Thomas Boller has been added as an inventor as requested by papers filed under 1.48(a).

Claim Rejections - 35 USC § 112

10 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15 Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

20 The claims are confusing and unclear by claim 1 failing to set forth clear, distinct and positive process steps. In line 2 of claim 1, "bead-like" is uncertain as to meaning and scope. Being like a bead is relative and subjective.

The process is unclear as to when in the process steps a diluent
25 is present, droplets are dispersed and radical polymerization is carried out.

Art Unit: 1651

A material that is a protective colloid is uncertain since what and how it protects has not been set forth.

In claim 3, "characterized in that" should be replaced with --- wherein --- to be clear.

5 Reciting "U/g moist" in brackets in line 3 of claim 4 is confusing since the purpose of the brackets is uncertain.

 Claims 5-10 provide for the use of a support for various uses, but since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is
10 intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

 Claims 5-10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the
15 process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

20 ***Claim Rejections - 35 USC § 102***

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

 A person shall be entitled to a patent unless -

Art Unit: 1651

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5 Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Kraemer et al (4,070,348) or Kramer et al (4,247,643).

The claim requires a support polymer that has a binding capacity for penicillin amidase of at least 220 U/g, and a swelling factor of at most 1.5.

10 Kraemer et al and Kramer et al disclose support polymers for enzymes and proteins that are prepared from a monomer mixture containing a) acrylamide or methacrylamide, b) glycidyl methacrylate or allyl glycidyl ether and c) methylenebisacrylamide or methylenebismethacrylamide.

15 Support polymers of Kraemer et al or Kramer et al will inherently have a binding capacity and swelling factor as required by the present claims due to the monomers used in preparing the support polymer. The support polymer of claim 4 does not have to be made by the process of claim 1 since claim 4 recites in line 1 that the support polymer "can
20 be" synthesized by the process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

25 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the
30 invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any
5 evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art
10 under 35 U.S.C. 103(a).

Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraemer et al or Kramer et al.

The claims are drawn to uses of the support polymer of claim 4 for binding proteins or enzymes, in chromatography, for synthesis of
15 pharmaceuticals and for stereospecific synthesis of chiral substances.

The polymers of Kraemer et al and Kramer et al are used to bind enzymes for uses which enzymes are known to be used.

The presently claimed uses are obvious since the uses are known uses of enzymes.

20 Claims 1-3 are free of the prior art.

The Kasche et al and Kleese et al patents are made of record to further show using polymers to bind enzymes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff

Application/Control Number: 09/600,180

Page 6

Art Unit: 1651

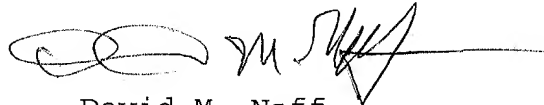
whose telephone number is 703-308-0520. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 703-308-

5 4743. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-0196.

10



David M. Naff
Primary Examiner
Art Unit 1651

15 DMN
9/30/03